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The Effect of Return on Equity (ROE) and Return on Investment (ROI) on Trading Volume

Sakina Ichsani[a]*, Agatha Rinta Suhardi[b]

a,b Widyatama University, Cikutra 204A, Bandung 40153, Indonesia

Abstract

Public interest about stocks and bonds increasingly growing, it's because the wider public curiosity about the conditions in the capital market. Indicator in profitability ratio is Return on Equity and Return on Investment. The reason why the ROE and ROI selected as measure is due in ROE and ROI using net income as a benchmark in measuring profitability. ROI and ROE affect the volume of trade, even though it gives weak results. Trading volume was influenced by other factors beyond profitability ratio. Investors do not just look at the profitability factor in this case is represented by the ROE and ROI.

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Keywords: Return on Equity; Return on Investment; Trading Volume

1. Introduction

Public desire to know more about stocks and bonds that can be known through the stock exchange is increasing from time to time. This can be seen by the larger public interest and concern will be the development of the stock market. Concern and the public interest are not limited to the development of the stock market, sector and stock exchange share index itself, but people have more interest in any company incorporated in the stock market and how the development of these companies.

According to Suad Husnan (2001), the role of the capital market is very important in the economy of a country, this is because the effect of capital market will affect the course of the country's economy. The signal that the stock

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* Corresponding author. Tel.: +6-222-727-585-5; fax: +6-22-272-788-61.
  E-mail address: sakina.ichsani@widyatama.ac.id

of a company favored by the market is the level of the company's stock transactions is growing rapidly. The more shares interested by investors, the greater the volume of trading of its shares higher.If the company is profitable, then the company can share the profits in the form of a large dividend to its investors. The Company was also able to persuade investors to re-invest funds to the company.

The frequency of trading in stock exchange is a frame that the investors are seeing those companies. But seeing is not enough for the company, for the company, they need to see the volume of the trading. The more number of shares traded, indicated that the stock is increasingly in demand by the public.

In determining whether the company is profitable, the investor can perform financial statement analysis. Warren, Reeve and Fees (2005) explain that the objective of financial statement is used to evaluate a company's financial condition at this time and predict the results of operations and cash flows of the company in the future. The components contained in the financial statement are income statement, statement of owner's equity, balance sheet, cash flow statement and notes to the financial statement.

One ratio in financial statement analysis is profitability ratio. The ratio is a measurement of profitability in the analysis of financial statements that are useful to measure the extent of profitability earned by the company. The greater the profit rate indicates better management in managing the company.

Indicator in profitability ratio is Return on Equity and Return on Investment. The reason why the ROE and ROI selected as measure is due in ROE and ROI using net income as a benchmark in measuring profitability.

The empirical evidence about net income has been done by Emil R Sinaga (2010) and Roza Thoriri (2013). Emil R Sinaga researched about the effect of cash flow and net income to trading volume has been claimed that there is a significant effect between cash flow and net income to trading volume.

In line with Emil Sinaga, Roza Thoriri researched about the effect of cash flow and net income to trading volume has been claimed that there is a significant and positive effect between cash flow and net income to trading volume. The investors believe that the company's stock price will increase if the net income is constantly increasing.

Based on the background above, the authors conducted a research with the title the effect of Return on Equity and Return on Investment on Trading Volume Stocks.

2. Literature Review

According to Sutrisno (2007:9) financial statements are : "Financial Statement are prepared to provide information of company's financial to stakeholders (management, owners, creditors, investors, goverments, and other parties)".

Profitability ratios measure enable analysts to evaluate the firm's profits with respect to a given level of sales, a certain level of assets, or the owners' investment. Owners, creditors, investors, management and stock holders pay close attention to boosting profits because of the great importance the market places on earnings. Return on Total Assets often called the return on investment (ROI) measures the overall effectiveness of management in generating profits with its available assets. Net income is the excess of all revenue and expense, some books called net income with earning after tax.

According to Mardiyanto (2009:196) Return on Investment is ratio used to measure company's ability to generate profits from investing activities".

To measure Return On Investment (ROI) can be formulated as follows :

$$ROI = \frac{Earning\ After\ Tax}{Total\ Assets}\ x\ 100\% \qquad (1)$$

Return On Investment indicates how much will the profit gained by using the entire assets owned by the company. According to Lestari and Sugiharto (2007:196) good rate return of Return on Assets (ROA) if > 2%.

Return on Equity (ROE) according to Mardiyanto (2009:196) are: "The ratio used to measure company's success in generating profits for shareholders". According to Lestari and Sugiharto (2007:196) good rate return of Return on Equity (ROE) if > 12%.

Acooding to Sutrisno (2007) to measure ROE the formulation are as follows :

$$ROE = \frac{Earning\ After\ Tax}{Total\ Equity}\ x\ 100\% \tag{2}$$

Shares are the most popular type of effect used by issuers to raise funds from the public and also the most popular in the capital market (Rusdin, 2005:69). Shares can be defined as a sign of ownership or possession of a person or entity in a corporation or limited liability company (Darmaji dan Fakhruddin,2011:5).

Volume of shares traded is the number of all shares traded within a specified period (Hastuti dan Sudibyo dalam Emil Rivantu (2010:13). Trade stocks actively show that the stock favoured by investors which means the stock is traded quickly. Trading activity did not differ with the trade in general involving sellers and buyers. Of the stock trading that occurs it will generate a volume of stock trading. This causes the number of transactions in shares or stocks that are traded volume can fluctuate daily.

The high and low trading volume stocks are judgments are influenced by many factors. As the company's performance, policy directors in other investments, economic conditions, government policies, income levels, inflation, supply and demand and the ability to analyze the effect of stock price itself is also a part of things that affect the volume of stock trading and many more factors influencing.

3. Methodology

This research is a secondary survey research, the samples taken is from the company's financial report that's reported in Indonesia Stock Exchange. This study is a survey of secondary data issued by the Indonesia Stock Exchange. Explanatory research is an explanation which focuses on the relationship between the variables of research and testing hypotheses formula. Judging from the dimensions of time the research is a data panel or pooled data. Research data panel is a combination of a cross - sectional and time series. In this study, the data obtained are the financial statements report and the volume of stock trading company that listed on the Indonesia Stock Exchange from 2009 to 2013. The company take is the most active in the trading volume of its shares transaction.
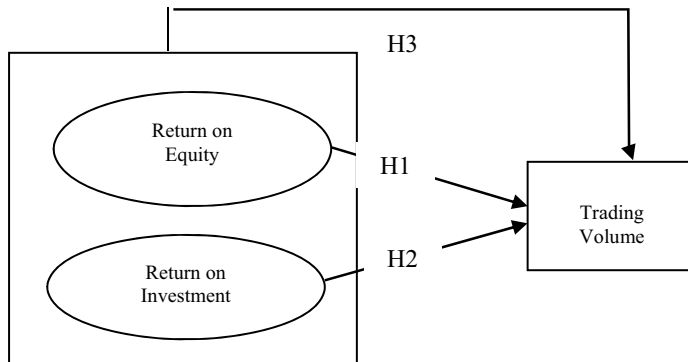

Figure 1: Conceptual Framework

Based on the theories and concepts previously, we can build those following hypotheses:

H1: There is an effect from return on equity on trading volume in most active and consistent stocks in 5 years on the Indonesia Stock Exchange
H2: There is an effect from return on investment on trading volume in most active and consistent stocks in 5 years on the Indonesia Stock Exchange
H3: There is an effect return on equity and return on investment on trading volume in most active and consistent stocks in 5 years on the Indonesia Stock Exchange

Samples in this study are the most active stocks by trading company whose consistent active from 2008-2013 on the Indonesian Stock Exchange. The source is collected from Indonesia Stock Exchange website. The dependent variable in this study is trading volume. Trading volume is the frequency and amount of trade in one year. The

independent variables in this study are:

1. Return on Equity (ROE), the formula for ROE is earning available for common stock holders equity divided by total equity.
2. Return on Investment (ROI) or Return on Assets (ROA), the formula for ROI is earning available for common stock holders divided by Total Asset.

Research methods used in this research are descriptive and verificative method. The independent variable in this study is the Return on Equity (X1) and Return on Investment (X2) and the dependent variable is the Trading Volume (Y). These data to test the classical assumption of normality test, multicollinearity test, autocorrelation test, and homogeneous test. Then the data were analyzed using regression analysis. Analysis of data using linear regression to see the strength effect of independent variable on the dependent variable from the determinant coefficient indicated by the R square that shows how far the independent variable can explain the dependent variable. Population in this research are the most active and consistent stocks in trading volume in 5 years listed in Indonesia Stock Exchange (IDX) period of 2009 – 2013 which total 10 companies. Sampling technique using purposive sampling. As for the criteria used are as follows :

1. The companies used in this research are companies whose active and consistent stocks by trading volume in Indonesia Stock Exchange (IDX) period 2009-2013.
2. Bumi Resources Tbk, Bakrieland Development Tbk, Energi Mega Persada Tbk and Bakrie Sumatra Plantations Tbk are excluded from research object due to negative value of ROI and ROE with the result that affects the analysis data result.

Table 1: Companies of Research Object Sample

No	Companies Names
1	Adaro Energy Tbk
2	Aneka Tambang (Persero) Tbk
3	Alam Sutera Realty Tbk
4	Bank Negara Indonesia Tbk
5	Sentul City Tbk
6	Bank Mandiri (Persero) Tbk
7	Elnusa Tbk
8	Kalbe Farma Tbk
9	Perusahaan Gas Negara (Persero) Tbk
10	Telekomunikasi Indonesia Tbk

4. Result
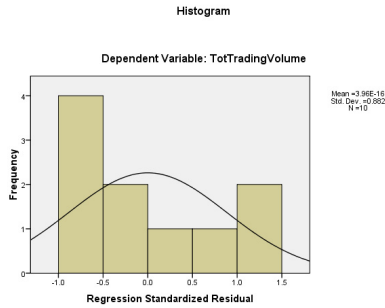
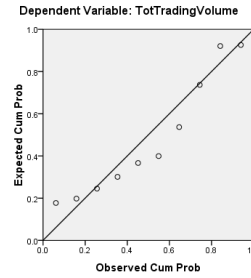Figure 2: Histogram Variable Y

Figure 3: Normality Test

Figure 2 shows that the variable Y (Trading Volume) is in normal distribution as a histogram shaped like a bell-shaped. Bell-shaped are the characteristic of the normal distribution of data. Figure 3 show that the data variable Y spread near the diagonal line and follow the direction of the diagonal line. Of the figure 3, it can be concluded that the data were normally distributed. It means that parametric statistics can be used. Data spread tend to be in the line equation. For autocorrelation test, we can see Durbin Watson on table 1. From the SPSS score, Durbin Watson score is 3.048 and it is under DW>+2. It means that there are positive autocorrelation. Multi Correlation Test

$$VIF = \frac{1}{1 - R^2} = \frac{1}{1 - 0.072} = 1.077$$ VIF value is under 10, it means that there are no multi correlation relations.

Table 2: Auto Correlation Test ROE, ROI on Trading Volume

Model	R	R Square	Adjusted R Square
1	.268ᵃ	.072	-.194

From table above, we can see correlation ROE and ROI with trading volume is 0.268. This shows positive correlation between ROE and ROI with trading volume. R-square is 7.2%. It means that trading volume is influenced by ROE and ROI 7.2%, the rest of it (92.8%) influenced by other factors.

Table 3: Auto Correlation Test ROI on Trading Volume

Model	R	R Square	Adjusted R Square
1	.258ᵃ	.067	-.050

From table above, we can see correlation ROI and trading volume is 0.258. This shows positive correlation between ROI and trading volume. R-square is 6.7%. It means that trading volume is influenced by ROI 6.7%, the rest of it (93.3%) influenced by other factors.

Table 4: Auto Correlation Test ROE on Trading Volume

Model	R	R Square	Adjusted R Square
1	.264[a]	.070	-.046

From table above, we can see correlation ROE and trading volume is 0.264. This shows positive correlation between ROE and trading volume. R-square is 7%. We usually explain R-square with determination co-efficient. 67% means that trading volume is influenced by ROE 7%, the rest of it (93%) influenced by other factors.

5. Conclusion

Correlation co-efficient ROE and ROI with trading volume indicators is 0.268. This shows weak correlation between ROE and ROI with trading volume indicators. R-square is 7.2%, means that trading volume is influenced by ROE and ROI 7.2%, the rest of it influenced by other factors. ROE and ROI have influence or role in trading volume stocks.

Correlation co-efficient ROE and trading volume indicators is 0.258. This shows weak correlation between ROE and trading volume indicators. R-square is 6.7%, means that trading volume is influenced by ROE and ROI 6.7%, the rest of it influenced by other factors. ROE has influence or role in trading volume stocks.

Correlation co-efficient ROI with trading volume indicators is 0.264. This shows weak correlation between ROI with trading volume indicators. R-square is 7%, means that trading volume is influenced by ROE and ROI 7%, the rest of it influenced by other factors. ROI has influence or role in trading volume stocks.

Based on the results turned out to ROI and ROE affect the volume of trade, even though it give weak results. Trading volume was influenced by other factors beyond profitability ratio. It can be concluded that investors do not just look at the profitability factor in this case is represented by the ROE and ROI. This stock purchase decisions that led to stock trading volume increased and decreased.

The authors suggest that further research, which aims to determine the factors that affect the volume of stock trading. However, further research is not limited to the factors in the financial statements, but external factors such as the time of the announcement of financial statements can be one of the influences on stock trading volume.

Factors that affected stock trading were influenced by many factors other than the Return on Equity (ROE) and Return on Investment (ROI). Trading volume is influenced by ROE and ROI in a small proportion. Other factors that affect the volume of stock trading is the internal factors and external factors.

Internal factors that affecting trading volumes are other profitability ratios besides Return on Equity and Return on Investment, stock prices, operating income and net income. External factors that affecting trading volumes are the exchange rate, inflation, interest rates, moral hazard that impact the decreasing public trust to company, negative issues about the company and the situation in the global economy.

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